Develop a web application using Node-Red Services

Date: 16-11-2022

Team Id: PNT2022TMID19635

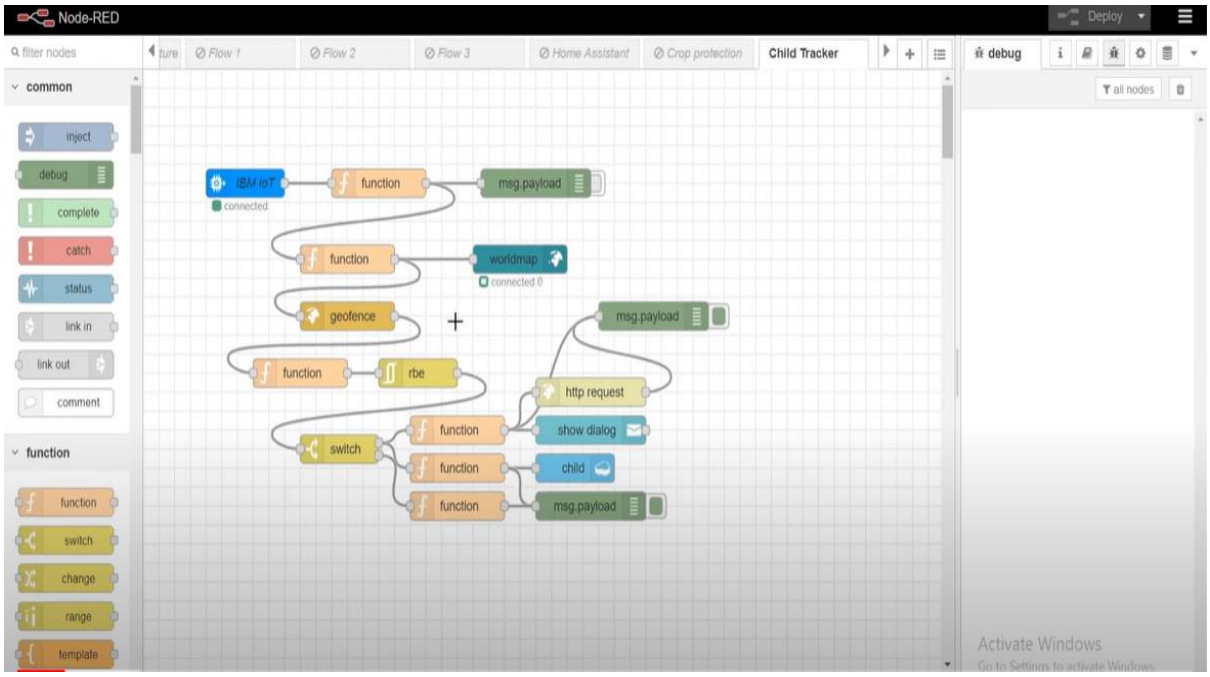
Project Name: IoT Based Safety Gadget for Child Safety Monitoring and Notification

Maximum marks: 4

IoT Based Safety Gadget for Child Safety Monitoring and Notification:

Develop a web application using Node-Red Services Steps:

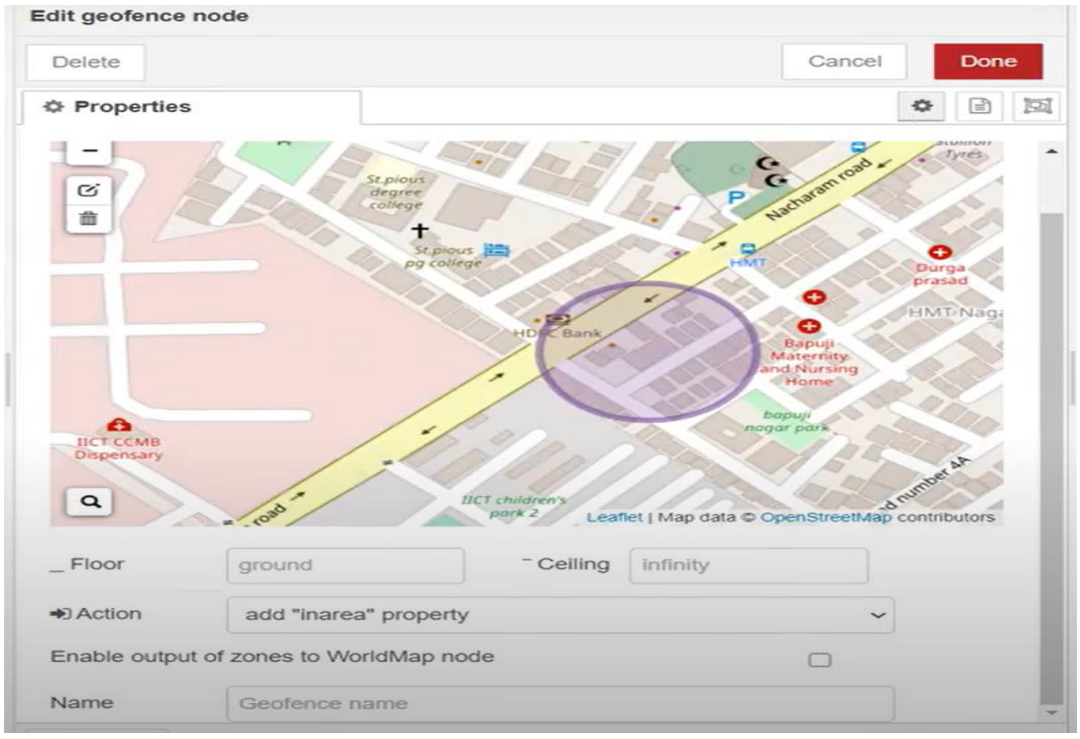
1.Open a Node-Red Project:



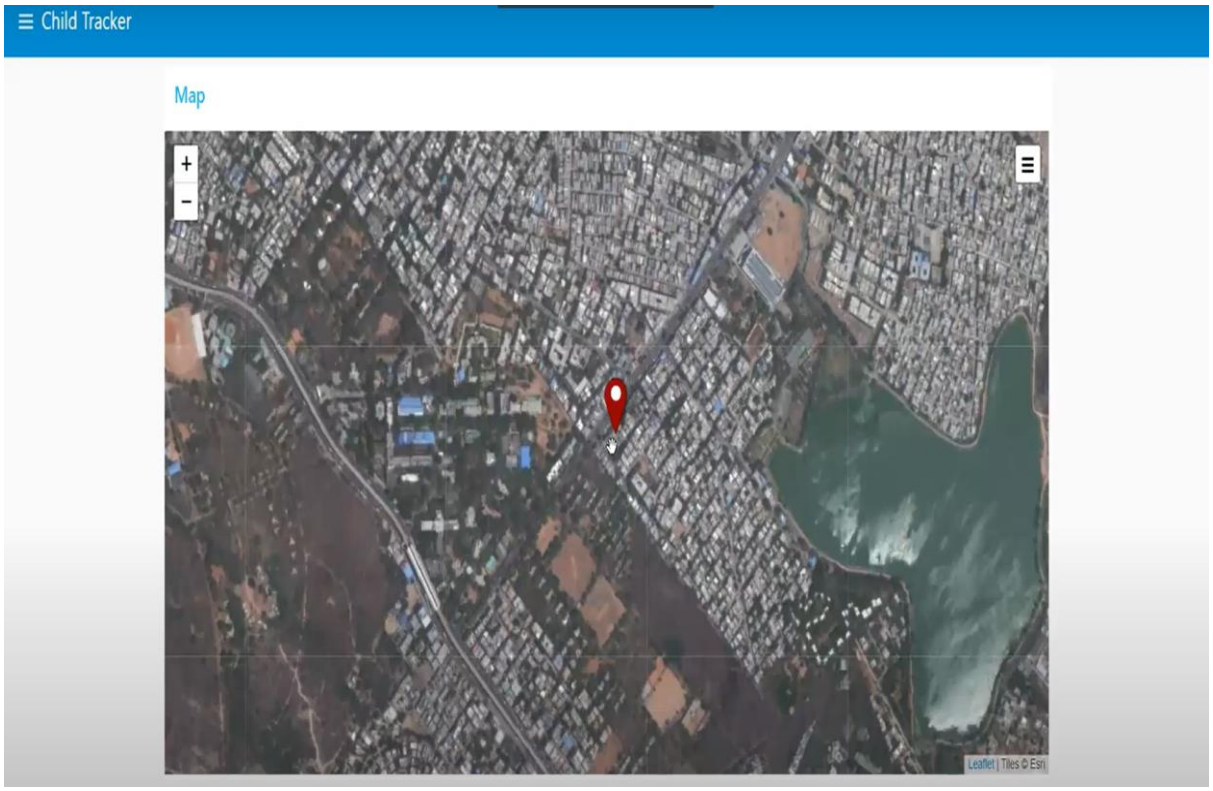
2.Add code to get location in Python:

```
import json
import wiotp.sdk.device
import time

myConfig = {
    "identify": {
        "orgId": "fy2vxg",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
        name = "Sri Eshwar College of Engineering"
        #in area location

        #latitude= 17.4225176
        #longitude= 78.5458842

        #out area location

        latitude= 17.4219272
        longitude= 78.5488783
        myData={'name':name,'lat':latitude,'lon':longitude}
        client,publishEvent(eventId="Status",msgformat="json",data=myData,,qos=0,onPublish=None)
        print("Data published to IM IoT platform:",myData)
        time.sleep(5)

    client.disconnect
```

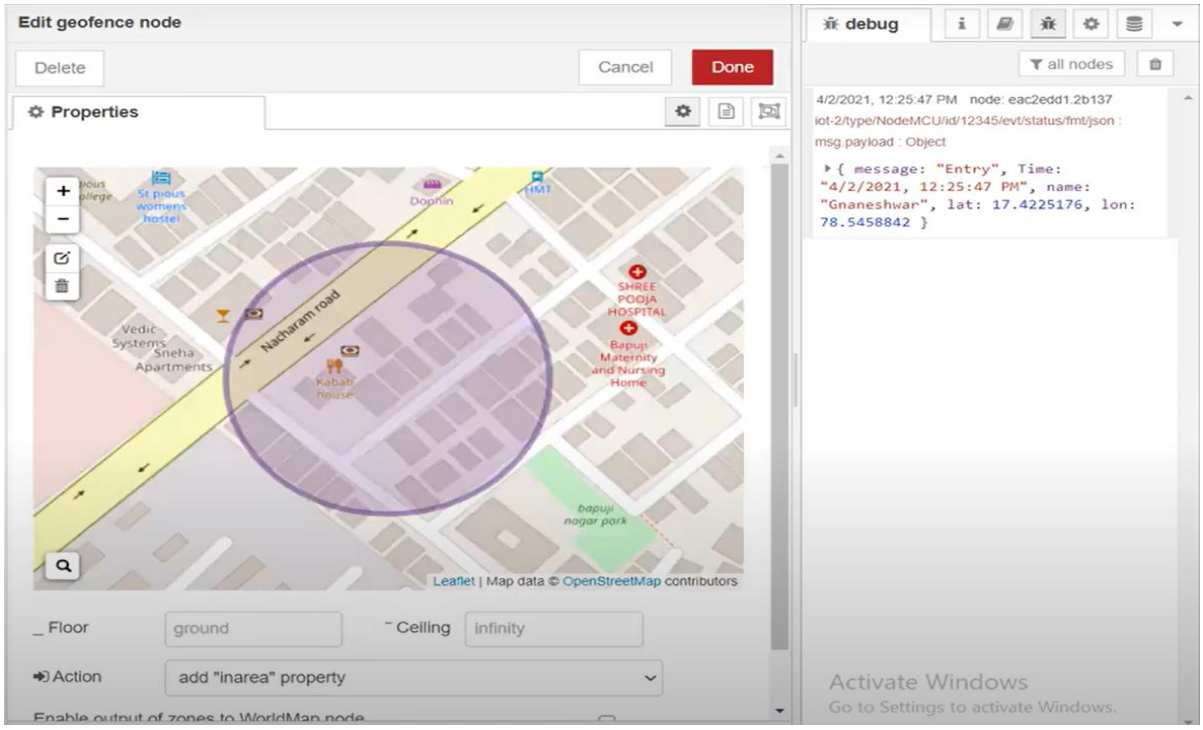
3.Create the Geofence:



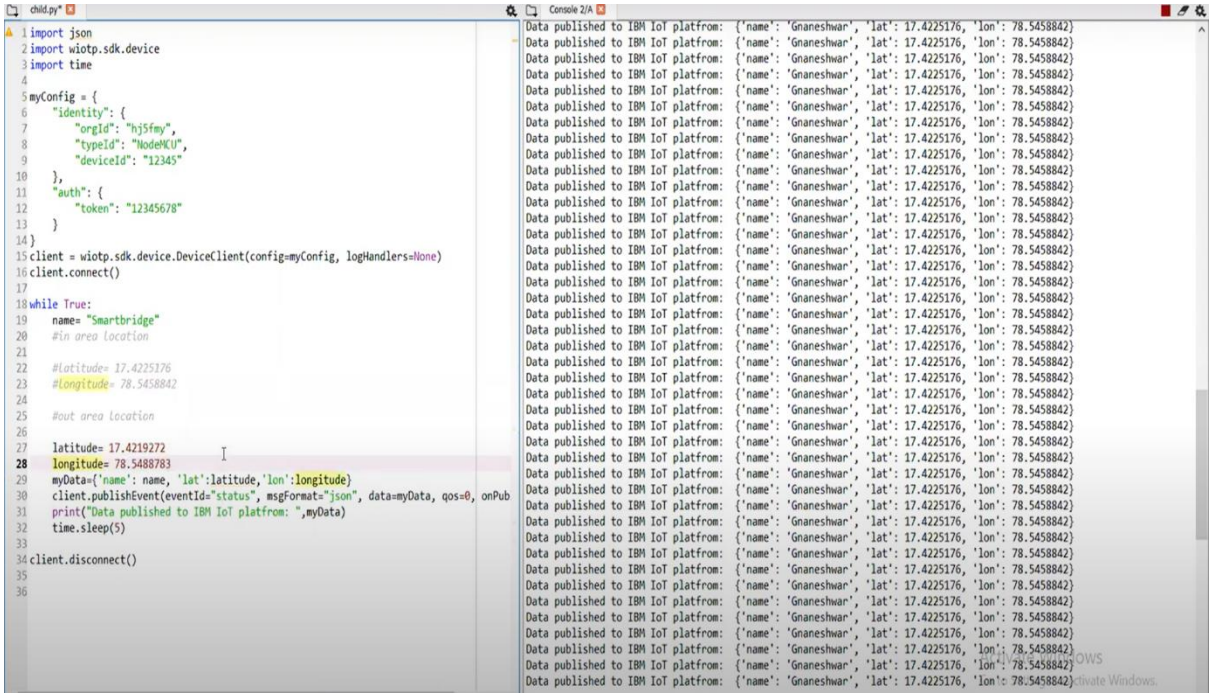
4.Locate the place:



5.Create the Geofence:



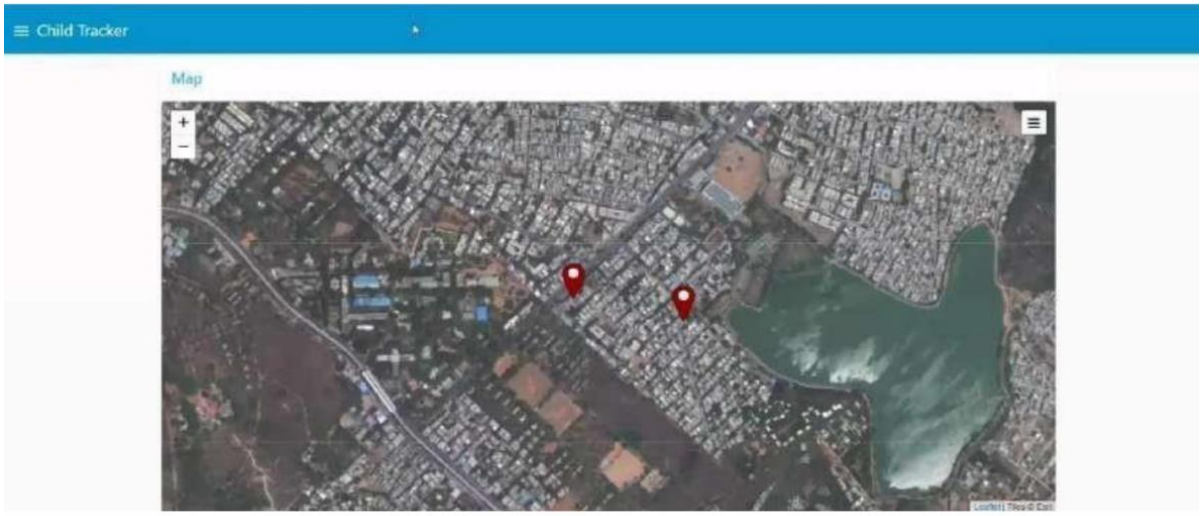
6.Python scripts sent requests to IBM cloud:



```
import json
import wiotp.sdk.device
import time

myConfig = {
    "identity": {
        "orgId": "hj5fmy",
        "typeId": "NodeMCU",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name= "Smartbridge"
    #in area location

    #Latitude= 17.4225176
    #longitude= 78.5458842

    #out area location

    latitude= 17.4219272
    longitude= 78.5488783
    myData={'name': name, 'lat':latitude,'lon':longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPub
    print("Data published to IBM IoT platfrom: ",myData)
    time.sleep(5)

client.disconnect()
```

```
Data published to IBM IoT platfrom:  {'name': 'Gnaneshwar', 'lat': 17.4225176, 'lon': 78.5458842}
```

7. After running the script, the web UI shows “Person is not in the particular area”:



8.Conclusion:

Developed the web application using Node-Red Successfully.